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Technical Report 62

May 1960

The Revision of NIKE Platoon Leader Job Descriptions: AJAX to HERCULES

by

Edgar M. Haverland and Walter J. Fightmaster

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**U.S. Army Air Defense Human Research Unit
Fort Bliss, Texas**

Under the Technical Supervision of

**The George Washington University
HUMAN RESOURCES RESEARCH OFFICE
operating under contract with
THE DEPARTMENT OF THE ARMY**

THE REVISION OF NIKE PLATOON LEADER
JOB DESCRIPTIONS: AJAX TO HERCULES

by

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Task SAMOFF I

This study was conducted while Dr. Joseph C. Hammock was Director of Research of the U.S. Army Air Defense Human Research Unit.

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SUMMARY AND RECOMMENDATIONS

MILITARY PROBLEM

The objectives of this study were to extend the development of job descriptions for NIKE Battery Officers by (1) determining procedures useful in revising job descriptions to keep them up to date and (2) providing updated job descriptions for the platoon leader positions in a NIKE HERCULES (Universal) battery.¹

RESEARCH PROBLEM

The development of job descriptions for NIKE AJAX Battery Officers has been described in another report;² these descriptions were used as a basis for the revisions undertaken in this study.

This report describes the procedures used to revise the job descriptions for NIKE AJAX platoon leaders in developing job descriptions for NIKE HERCULES (Universal) platoon leaders.

METHOD

Up-to-date information on the duties of platoon leaders in the NIKE HERCULES system was obtained from the following sources: NIKE field units, the U.S. Army Air Defense School, the 1st Guided Missile Brigade, USARADCOM directives, and field manuals and training manuals concerning NIKE HERCULES equipment and procedures.

The information was collated and analyzed to determine the consensus of all authorities on the job requirements for NIKE HERCULES platoon leaders. The completed job descriptions are published as an appendix to this report.

CONCLUSIONS AND IMPLICATIONS

(1) In updating the platoon leader job descriptions, it was noted that:

(a) The most extensive changes in the revised job descriptions occurred in the sections on drills and alerts.

(b) Changes in the sections of the job descriptions concerned with administrative duties, such as those on manning, military management, supply, extra-duty assignments, and the care and maintenance of equipment consisted mainly of changes in nomenclature and in references to manuals and directives.

¹The term "NIKE HERCULES (Universal)" applies in this report to all NIKE HERCULES batteries, whether or not they also have AJAX missiles.

²Charles L. Darby *et al.*, *The Development of Job Descriptions for NIKE AJAX Battery Officers*, Technical Report 54, Human Resources Research Office, Washington, April 1959.

SUMMARY AND RECOMMENDATIONS

(2) With regard to general procedures for preparing revised job descriptions, the following observations were made:

(a) A generalized rather than a specific description of the job is less likely to become out of date when modifications are made in equipment or procedures. However, if a job description is to serve the usual purposes of explicit guidance in the performance of the job or in the formulation of training or evaluation programs for the job, it must be relatively specific.

(b) To avoid rapid obsolescence, references to printed materials in job descriptions should be in a general form; for example, "appropriate manuals and directives."

(c) The document may be more easily kept unclassified if the description is general rather than specific.

(3) The specific job descriptions resulting from this research are suitable for use by agencies responsible for training junior officers for service in NIKE HERCULES (Universal) batteries:¹

(a) They may be used to develop statements of training objectives in terms of actual on-the-job duty requirements.

(b) These job descriptions may be given to the officers at the beginning of their training in order to acquaint them with the duties of the positions for which they are being trained, and thus prepare and motivate them to profit from their training experiences.

RECOMMENDATION

It is recommended that the procedures used to develop revised job descriptions for the platoon leaders of the NIKE HERCULES system be used by training agencies to revise and develop job descriptions for present and future complex weapon systems.

¹These job descriptions may also be useful in connection with the duties of platoon leaders in NIKE AJAX batteries, if obvious references to the special or additional features of the NIKE HERCULES equipment are deleted.

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**DESCRIPTION
OF THE RESEARCH**

**THE REVISION OF NIKE PLATOON LEADER
JOB DESCRIPTIONS: AJAX TO HERCULES**

BACKGROUND AND PROBLEM

The first stage of the work undertaken in HumRRO Task SAMOFF on the training of Surface-to-Air Missile Officers was that of developing job descriptions for NIKE AJAX Battery Officers. The development of these job descriptions has been described in another report.¹ The main reason for developing these job descriptions was to obtain explicit, detailed guidance for training efforts and to provide an outline upon which to construct proficiency measures. Copies of these job descriptions have been requested by the Air Defense School and the 1st Guided Missile Brigade for use in giving student officers an idea of the kinds of duties they will be required to perform.

With the advent of the NIKE HERCULES (Universal) system, some changes have occurred in the duties of NIKE Battery Officers, particularly in the platoon leader positions. The revision of the platoon leader job descriptions was undertaken for two reasons: First, the best and most up-to-date job descriptions were needed for a stage of research now in progress in which a detailed analysis is being made of the skills and knowledges necessary to perform the duties of a job. Second, since the NIKE AJAX Battery Officer job descriptions being used to orient student officers are somewhat out of date, it was thought that revised versions of the platoon leader job descriptions would be useful.

This report outlines procedures found useful in revising job descriptions to keep them up to date when the jobs described have been changed. It is written in terms of the procedures actually used in revising the NIKE AJAX platoon leader job descriptions so that they were applicable to the NIKE HERCULES (Universal) platoon leader jobs.

PROCEDURE

Sources of Information

A broad spectrum of information sources for the revisions was consulted. These included comments from field units, the U.S. Army Air Defense School, and the 1st Guided Missile Brigade; the crew drill recommended for NIKE HERCULES batteries by USARADCOM; and manuals and texts on NIKE HERCULES equipment and procedures.

Battery officers in three of the earliest batteries in which the NIKE HERCULES (Universal) equipment was installed were given copies of the NIKE AJAX platoon leader job descriptions and asked to mark

¹Charles L. Darby *et al.*, *The Development of Job Descriptions for NIKE AJAX Battery Officers*, Technical Report 54, Human Resources Research Office, Washington, April 1959.

on them the changes they thought necessary to describe the platoon leaders' jobs in the new system. Personnel in the NIKE HERCULES Division of the Guided Missile Department (now the High Altitude Missile Department), U.S. Army Air Defense School, and members of the Technical Writing Team in the 1st Guided Missile Brigade at Fort Bliss, Texas, were also given copies of the NIKE AJAX platoon leader job descriptions and asked to indicate the changes necessary for their use with the new equipment.

The comments of these three groups were tied rather closely to the items in the NIKE AJAX platoon leader job descriptions and consisted mainly of changes in nomenclature, deletion of a few items as inapplicable, and addition of a few new items.

These comments were collated on file cards in the following manner: For each item in which a change was suggested, the item as originally worded in the NIKE AJAX platoon leader job descriptions was typed at the top of the card, and the suggested change(s), with the source(s) identified, typed below. In this way all the suggested changes for one item (sometimes conflicting) were presented together, with sources identified, so that they might be suitably weighed in deciding on the revised item.

While the comments were being considered, a copy of the crew drill suggested by USARADCOM for NIKE HERCULES batteries became available. This provided an excellent guide for the general organization of the drills-and-alerts sections of the job descriptions.

Throughout the revision of the job descriptions the latest printed material on the NIKE HERCULES (Universal) system was frequently consulted. The most useful sources were the U.S. Army Air Defense School texts on the NIKE HERCULES Antiaircraft Guided Missile System¹ and the final draft of the Field Manual, "Procedures and Drills for the NIKE HERCULES System"². These references were used to check the correctness of the items referring to physical details of the equipment, and the logical order of the operation of equipment implied in the job descriptions.

The most extensive changes in this revision of job descriptions occurred in the sections on drills and alerts. These sections were substantially reorganized and rewritten. The revisions in the sections on manning, military management, supply, extra-duty assignments, and care and utilization of equipment consisted mainly of changes in nomenclature and deletion of references to specific manuals and directives.

Both platoon leader job descriptions contained six major sections (duties). When it was found that four of the six could be made identical, it was decided to combine the two job descriptions into one document.

¹ST 44-162A, Battery and Battery Control Area (April 1958) and ST 44-162B, Missile and Launching Area (May 1958). Changes to these two documents up to November 1958 were also considered.

²This draft was dated November 1958. The document was later published by the Department of the Army as Field Manual 44-82, March 1959 (CONFIDENTIAL).

The first part of this combined job description consists of the duties common to the two platoon leader positions. The second part consists of separate sections for the Fire Control Platoon Leader and the Launching Platoon Leader. The job description is reproduced as an appendix to this report.

Limitations of Revised Job Descriptions

The job descriptions were written to include most, if not all, of the duties which the NIKE HERCULES platoon leader might perform. But it should be emphasized that the job descriptions are not perfect descriptions of what the platoon leaders' jobs actually involve. Practices and procedures may vary somewhat in different units. The number and proficiency of available personnel are important factors in determining the scope and nature of the duties actually performed by the platoon leaders. An experienced and highly proficient platoon leader may actively carry out or supervise a much wider range of activities than an inexperienced and uncertain platoon leader may attempt, especially if there are qualified warrant or noncommissioned officers who may be depended upon to take over in many areas.

In revising job descriptions, it is important to use the latest obtainable sources of information about policies and procedures. For this revision, a copy of the USARADCOM crew drill for NIKE HERCULES units was obtained very soon after it was written, and several months before formal publication. Also, the Field Manual, "Procedures and Drills for the NIKE HERCULES System," was obtained in final draft form several months before it would have become available through normal distribution channels after publication. Finally, an effort was made to include all pertinent changes in the U.S. Army Air Defense School texts for the NIKE HERCULES Antiaircraft Guided Missile System. The job descriptions are not completely up to date; changes in equipment and in procedures are continually being made and many of these affect the platoon leaders' duties. But use of the latest obtainable sources of information resulted in a considerably more up-to-date revision of the job descriptions than would otherwise have been possible.

Any attempt to write a job description soon encounters the problem of how generally or how specifically the job should be described. A general description of the job is less likely to become outdated when modifications are made in equipment or procedures, and the document is less likely to require a security classification if the description is general rather than specific. However, if a job description is to serve the usual purposes of explicit guidance in the performance of the job, or the formulation of training or evaluation programs for the job, it must be relatively specific. The NIKE AJAX platoon leader job descriptions were written at a moderately specific level, and this feature has been retained in the revisions, with one notable exception. In the NIKE AJAX platoon leader job descriptions, references were made to specific field manuals and USARADCOM training memoranda. In the

revised job descriptions these references have been changed to a general form; for example, "appropriate manuals and directives."

The job descriptions are written in a style which makes extensive use of lead verbs, such as "supervises," "insures," and "acts." To aid in uniform interpretation of the description of job activities, a glossary giving definitions and connotations of these lead verbs is available as Appendix E in the report describing the development of the job descriptions for NIKE AJAX Battery Officers.¹

¹Darby *et al.*, *op. cit.*

Appendix

**JOB DESCRIPTIONS FOR
NIKE HERCULES (UNIVERSAL) PLATOON LEADERS**

Appendix

JOB DESCRIPTIONS FOR NIKE HERCULES (UNIVERSAL) PLATOON LEADERS

Sections I, II, III, and IV below describe duties which are common to the jobs of both Fire Control and Launching Platoon Leaders.¹

- I. **Manning** — The platoon leader is responsible for meeting the manning requirements of the platoon.
 - A. Acts to keep manpower at sufficient strength to permit fulfillment of platoon mission.
 1. Consults with subordinates concerning manning needs in platoon.
 2. Advises battery commander of personnel shortages which impede platoon operation.
 - B. Supervises disposition of platoon personnel so as to achieve maximum efficiency in platoon operation:
 1. Confers with battery commander, platoon sergeant, platoon warrant officer, and section chiefs concerning most efficient employment of filler and replacement personnel.
 2. Assigns filler and replacement personnel to duty positions in accordance with platoon manning requirements.
 3. Insures that platoon sergeant makes all arrangements for equipping filler and replacement personnel and establishing them as members of the platoon.
 4. Delegates to platoon sergeant the responsibility of distributing platoon personnel among details engaged in meeting platoon and battery training, maintenance, operational, and housekeeping requirements.
 5. Supervises maintenance of minimum manning roster to insure that manning of equipment conforms to the designated alert status.
 - C. Insures that assigned personnel are adequately trained.
 1. Orients replacement and filler personnel on platoon functions and standards and the local tactical situation.
 2. Supervises the training of filler and replacement personnel by qualified subordinates.
 - a. Delegates to qualified subordinates the responsibility for training newly arrived filler and replacement personnel.

¹Sections V and VI describe duties specific to the job of Fire Control Platoon Leader; Sections VII and VIII are specific to the Launching Platoon Leader.

- b. Observes subordinates as they train filler and replacement personnel and, where necessary, confers with instructors for the purpose of improving their instruction.
- 3. Evaluates trainee proficiency at operator jobs.
 - a. Conducts site alert status checks to observe the performance of the operators and crewmen at their various duty positions.
 - b. Judges operators' and crewmen's job proficiency on basis of time and sequence in performance of their duties.
 - c. Confers with platoon sergeant, section chiefs, and experienced operators and crewmen to determine training status of new personnel.
- 4. Directs remedial training as indicated by observation of trainee performance and consultation with experienced personnel.
- 5. Schedules with subordinates the rotation of operators and crewmen to various duty positions in order to develop over-all capability of platoon personnel.
 - a. Confers with subordinates concerning manning requirements and trainee achievements and capabilities.
 - b. Rotates trainees and instructors to new duty positions for further on-the-job training.
- 6. Conducts crew drill and evaluates ability of operators to perform their prefiring checks and adjustments and other duties as prescribed in appropriate manuals and in USARADCOM procedures.
- 7. Supervises the training of operators and crewmen to conduct abbreviated checks, and monitors maintenance personnel in training operators and crewmen to do daily checks.
 - a. Confers with maintenance personnel concerning nature and extent of assistance desired and types of training to be given.
 - b. Assigns trainees to qualified subordinates for appropriate training.
- II. **Morale, Discipline, and Military Management**—The platoon leader insures optimally effective platoon performance by acting to maintain morale and discipline at a satisfactory level and by insuring that platoon housekeeping meets standards of sanitation, health, and military requirements.
 - A. Keeps troops informed of current events and tactical situations through the use of informal visits and discussions in vans and barracks.
 - B. Makes recommendations to the battery commander for promotions of platoon personnel as the situation warrants, after receiving recommendations from subordinates.
 - C. Insures that living conditions for the platoon personnel are satisfactory.
 - 1. Conducts periodic inspections of barracks, buildings, and grounds to insure that housekeeping meets required standards of orderliness and cleanliness.
 - 2. Acts to insure that troops are as comfortably housed as the local situation permits.

3. Acts to improve convenience and attractiveness of living quarters occupied by platoon personnel.
 - D. Recommends appropriate disciplinary actions for poor performance of duties and minor infractions of discipline.
 1. Obtains facts pertaining to poor performance of duties and breaches of discipline.
 2. Recommends appropriate disciplinary action if infraction warrants.
 - a. Recommends restriction of pass privileges.
 - b. Recommends extra training details.
 - c. Recommends to battery commander company punishment under Article 15, Universal Code of Military Justice.
 3. Insures that corrective follow-up action is taken as deemed necessary.
 - E. Oversees preparation of the platoon for inspections by higher headquarters.
 - F. Assists battery commander in inspection of the platoon area, personnel, and equipment.
 - G. Insures that proper security measures are enforced in the platoon area.
- III. **Supply** – The platoon leader is responsible for insuring the availability of an adequate supply of authorized replacement parts, the accuracy of the platoon's stock record account, and the conformance of platoon supply procedures to appropriate regulations.
- A. Checks to confirm that the stock record account is accurate and that supply procedures conform to appropriate regulations.
 1. Checks with platoon warrant officer to verify the correctness of requisitioning, work orders, and property disposal procedures.
 2. Verifies through occasional checks that the stock record account is accurate and conforms to appropriate regulations.
 - a. Verifies the correctness of identification, authorization, and location data entered on stock record cards.
 - b. Verifies the accuracy of balances on hand and on requisition against inventory count and requisition file.
 3. Verifies through occasional checks that supplies on hand are warehoused in accordance with appropriate regulations.
 - a. Checks that storage bins and shelves are numbered as prescribed by appropriate regulations.
 - b. Checks compliance with standard operating procedures covering storage of specific items.
 - c. Inspects items on hand to verify that they meet serviceability standards.
 - B. Acts to insure the availability of an adequate supply of authorized replacement parts by conferring with platoon warrant officer and making occasional checks.
 1. Verifies that requisitions are promptly prepared when the supply on hand falls below the authorized reorder point.

2. Verifies that work order requests for repairable nonexpendable parts are promptly prepared.
 3. Verifies that action has been taken to have needed items emergency-requisitioned when normal requisitioning procedures fail to meet requirements.
 4. Verifies that the stock record account is analyzed to determine the cause of supply failure when the supply of stock on hand fails to meet the demand.
- C. Insures that all personnel of his unit are properly instructed in the care and maintenance of public property and in all principles of supply economy.
 - D. Ascertains and reports to the battery commander all cases and facts surrounding property loss through neglect, abuse, etc., for establishment and determination of pecuniary liability through the Statement of Charges or Report of Survey.
 - E. Insures that a current list is maintained on items lost or destroyed through normal operations (not as a result of the fault or neglect of anyone concerned) to insure that these supplies are accounted for on regular operational droppage reports.
- IV. **Extra-Duty Assignments**—The platoon leader may perform the duties of one or more of the following positions (or others as assigned):
- A. Serves as battery athletics and recreation officer.
 1. Organizes, implements, and supervises on-duty and off-duty athletics, such as physical training and individual and team sports.
 2. Organizes, implements, and supervises on-duty and off-duty recreational activity, such as picnics, dances, tours, etc.
 - B. Serves as battery safety officer.
 1. Conducts safety inspections to check compliance with safety SOP's.
 2. Acts to insure that violations of safety SOP's are corrected.
 3. Conducts safety council meetings and discussions.
 4. Serves on the battalion safety council.
 - C. Serves as battery fire marshal.
 1. Organizes, implements, and supervises battery plan for controlling fires.
 2. Conducts inspections of battery to locate and eliminate fire hazards and check adequacy of fire fighting equipment and plans.
 3. Maintains liaison with Army and civilian fire fighting organizations for proper utilization.
 4. Supervises fire fighting operation in event of fire in battery.
 - D. Serves as battery radiological survey officer in accordance with current directives.
 1. Supervises radiological monitoring activities of battery personnel.

2. Organizes and trains radiological survey parties in the battery.
 3. Insures that appropriate personnel are adequately trained in proper procedures to be used in case of nuclear accidents.
- E. Serves as battery security officer.
1. Organizes and implements battery security plan.
 2. Conducts inspections of battery to insure that current security measures are being properly carried out, and that any additional security precautions required are promptly instituted.
 3. Completes the required reports and logs concerning security according to current directives.
- F. Serves as battery postal officer.
1. Supervises postal activities of the battery and oversees the work of the postal clerk.
 2. Conducts inspections to insure that postal activities and records conform to Army postal regulations.
- G. Serves as battery post exchange (PX) and theater officer.
1. Enforces regulations concerning the establishment and operation of on-site PX and theater.
 2. Audits funds of PX and theater.
 3. Conducts inventories of PX merchandise.
 4. Maintains a checking account for PX and theater funds.
 5. Administers salaries of PX and theater stewards.
 6. Supervises proper maintenance of PX and theater records.
- H. Serves as a member of courts-martial or boards.
- I. Serves as trial counsel or assistant trial counsel.
1. Prepares necessary copies of charge sheets and allied papers for the court.
 2. Interviews prosecution witnesses and insures their presence at the trial; also insures attendance of defense witnesses.
 3. May act as recorder during court proceedings.
 4. Prepares the Record of Proceedings for signatures and processing.
- J. Serves as defense counsel or assistant defense counsel.
1. Prepares or assists in the preparation of the defense.
 2. Interviews defense witnesses.
- K. Serves as investigating officer.
1. Conducts investigation to ascertain facts and circumstances connected with personnel accidents, vehicular accidents, Reports of Survey, line of duty status cases, Article 32 (UCMJ), etc.

2. Prepares report stating facts and circumstances in accordance with provisions of AR 15-6 and SR 20-30-1.

Sections V and VI below describe duties which are specific to the job of the Fire Control Platoon Leader.

V. Care and Utilization of Equipment: Fire Control Platoon Leader—The fire control platoon leader is responsible for the care and utilization of equipment assigned to the platoon.

- A. Insures satisfactory status of organizational equipment.
 1. Conducts periodic inspection of platoon area.
 2. Delegates to the fire control warrant officer the responsibility for submitting Unsatisfactory Equipment Report (Form 468) for battery commander's approval.
 3. Reports to battery commander on conditions in platoon which warrant submission of Post Repairs and Utilities (R&U) Work Order (Form 527).
 4. Delegates to the fire control warrant officer the responsibility for submitting to the guided missile parts clerk a Request for Issue or Turn-In (Form 1546) to obtain replacement of used parts or equipment.
- B. When a mobile situation exists, supervises the emplacement and march order of tactical equipment.
 1. Coordinates the march order of tactical equipment in accordance with procedures described in appropriate manuals.
 - a. Supervises the march order of the trailer-mounted electronic shop.
 - b. Supervises the loading of acquisition antenna-receiver-transmitter group.
 - c. Supervises the march order of the trailer-mounted director station and trailer-mounted tracking station.
 - d. Supervises the march order of the trailer-mounted missile tracking and target tracking antenna-receiver-transmitter groups.
 - e. Supervises the march order of the radar test set and antenna and mast group.
 - f. Supervises the march order of cables.
 - g. Determines the order of march.
 2. Conducts survey of platoon area in order to properly emplace platoon equipment.
 - a. Determines radar-to-radar parallax.
 - b. Determines radar-to-launcher parallax.
 3. Coordinates the emplacement of tactical equipment in accordance with procedures described in appropriate manuals.
 - a. Supervises emplacement of acquisition antenna-receiver-transmitter group and trailer-mounted electronic shop.
 - b. Supervises emplacement of the trailer-mounted director station and trailer-mounted tracking station.

- c. Supervises emplacement of the trailer-mounted missile tracking and target tracking antenna-receiver-transmitter groups.
 - d. Supervises emplacement of the radar test set and antenna and mast group.
- 4. Supervises the installation of intrabattery administrative and operational communication network.
- C. Insures the proper use and operational readiness of tactical equipment.
 - 1. Ascertains that battery control area equipment is operationally ready.
 - a. Conducts informal inspection of all stations in battery control area upon reporting for duty to insure that equipment is properly manned and that system checks are being carried out as necessary.
 - (1) Oversees performance of orientation and synchronization of radars by operator personnel.
 - (2) Observes performance of system checks by operator or maintenance personnel to determine that checks are being performed in the proper manner and in the prescribed sequence.
 - (3) Inspects system log check sheets to determine that checks have been performed and that check sheets are being kept up to date.
 - b. Directs that tests of equipment function be conducted by qualified subordinates.
 - (1) Conducts performance of simultaneous tracking test which is prescribed in appropriate manuals.
 - (2) Evaluates performance of equipment as recorded on simultaneous tracking test check list.
 - (3) Conducts computer dynamic checks and insures proper performance.
 - c. Submits Multichannel Data Recorder Record and Plotting Record to battalion headquarters for analysis and receives from battalion an evaluation of computer functioning and accuracy.
 - 2. Takes action to insure that the battery control area equipment remains in the state of readiness designated by sector.
 - a. Receives reports from maintenance personnel on status of equipment, including malfunctions found and actions taken to return equipment to operational basis.
 - b. Assists the fire control warrant officer in coordinating the activities of the maintenance section.
 - (1) Expedites action on job orders and parts requisitions to facilitate repair of equipment.
 - (2) Checks to insure that Technical Service Work Order (Form 811) is submitted to appropriate technical service.
 - (3) Checks to see that the guided missile parts clerk is furnished with a Request for Issue or Turn-In (Form 1546) and the accountable item being turned in for replacement.

3. Acts to insure completion of records pertinent to operation of tactical equipment.
 - a. Insures that the portion of the battery commander's log book concerning battery control area operation is kept up to date.
 - b. Completes that portion of Status of Defense (SOD) Reports dealing with status of equipment in battery control area.
 4. Collaborates with battery commander and maintenance personnel in construction of coverage and clutter diagrams.
- VI. Drills and Alerts: Fire Control Platoon Leader**—The fire control platoon leader is responsible for insuring the fulfillment of the platoon mission during drills and alerts.
- A. Serves as battery control officer (BCO) if designated by battery commander.
 1. Insures that the fire control platoon carries out procedures required by being placed in BATTLE STATIONS.
 - a. Hears alarm, or is notified by operations control (OC) operator. Goes to battery control console and puts on headsets of operations control line and command loop. Sits directly in front of plan position indicator (PPI) or in front of tactical control panel.
 - b. Positions the status switch to BLUE, operates the siren, and commands BATTLE STATIONS to the battery. (For exercises, commands BLAZING SKIES.)
 - c. Maintains communication with higher headquarters and within the battery.
 - (1) Notifies the battery commander of status of equipment and action being taken.
 - (2) Notifies Army Air Defense Command Post (AADCP) of operational status.
 - (3) Submits Out-of-Action Report, if necessary, with required information as to troubles encountered, to battery commander and to Army Air Defense Command Post.
 - d. Checks following, on way into director station (or later), and insures that computer operator makes correct settings:
 - (1) Parallax
 - (2) Burst time bias
 - (3) Minimum burst altitude (if applicable to mission)
 - (4) Height of site
 - (5) For a surface-to-surface mission, the following additional settings, made and checked:
 - (a) Final dive time
 - (b) Height displace
 - (c) Range, azimuth, and elevation of target
 - (d) Guidance cutoff switch
 - e. Gets condition readiness and action status from early warning plotting board (EWPB) operator.
 - f. Reports battle stations to battery commander.
 - g. Requests and receives battery communication and manning reports.
 - h. Reports status to Army Air Defense Command Post (AADCP) within given time limit.

- i. Monitors early warning plotting board; may receive early warning information on incoming targets directly from early warning plotting board (EWPB) operator.
 - j. Gets designation of hostile craft from Army Air Defense Command Post (AADCP) on operations control line.
 - k. Monitors MISSILES PREPARED meter to determine number and type of missiles prepared.
 - l. Monitors plan position indicator (PPI). Indicates designated targets to acquisition operator.
 - m. Makes ON DECK announcement to and receives acknowledgment from launching control officer (LCO).
 - (1) Makes mission-missile request in accordance with SOP and tactical situation.
 - (2) Releases mission-missile request to launching area by means of DATA RELEASED pushbutton. Announces DATA RELEASED. Waits for acknowledgment.
 - (3) Checks BURST OFFSET switch for proper position.
 - (4) Continually monitors tactical situation for changes in mission-missile request.
 - n. Monitors PPI for Fire Unit Integration Facility (FUIF) symbols, and acknowledges any designated targets.
 - o. Observes or receives notice of any electronic countermeasures (ECM) from acquisition operator. Announces electronic countermeasures to Army Air Defense Command Post (AADCP) using flash ECM report.
 - p. Selects targets on primary target line if not assigned by Army Air Defense Command Post (AADCP).
 - q. Has acquisition operator use Identification-Friend-or-Foe (IFF) as soon as target is within range and designates target as soon as possible. Directs acquisition operator to operate the FOE button.
 - r. Continues to monitor PPI: watches CONFIRM and TRACKED lights for change from AMBER to GREEN. Monitors TRACKED light.
 - s. Estimates number and maneuvering of targets and depresses MANEUVER, NONMANEUVER or MULTIPLE TARGET pushbutton. Reports target size, GEOREF and altitude to the early warning plotting board (EWPB) operator.
 - t. Observes operation of, or operates plotting boards.
 - (1) Turns PLOTTING BOARD CONDITION switch to OPERATE or orders computer operator to do so. When pens settle, turns switch to PLOT.
 - (2) Checks GYRO AZIMUTH (A_G) dial and compares azimuth information with horizontal plotting board (computer operator may do this).
 - u. Monitors TARGET GROUND SPEED meter, determines number of aircraft and altitude of aircraft and reports these data to Army Air Defense Command Post (AADCP).
2. Insures completion of RED status procedures.
- a. Upon receipt of LAUNCHING CONTROL GROUP READY FOR ACTION, MTR READY FOR ACTION, and TARGET TRACKED indication, announces PREPARE FOR ACTION

- and positions status switch to RED. Has the early warning plotting board (EWPB) operator report AT BATTLE STATIONS to the Army Air Defense Command Post (AADCP).
- b. Observes MISSILE-DESIGNATED light change from AMBER to GREEN.
 - c. Observes MISSILE-READY light change from AMBER to GREEN.
 - d. Sees MISSILE-TRACKED light change from AMBER to GREEN. Sees READY-TO-FIRE light change from AMBER to GREEN if target is tracked and FOE button has been pushed.
 - e. At the discretion of the BCO and if time permits before engagement, the BCO will command MISSILE ACQUIRE CHECK. One missile will be acquired per launching section in turn by the MTR. If engagement becomes imminent during the missile acquire check, the check will be terminated and the following steps carried out.
 - f. Orders computer operator or switchboard operator to zero-set multichannel data recorder.
 - g. Checks MINIMUM BURST ALTITUDE setting and position of BURST OFFSET switch.
 - h. Observes target position and predicted intercept point on horizontal plotting board and observes predicted altitude of intercept and predicted time of trajectory on vertical plotting board.
 - i. At the appropriate time, commands ABOUT TO ENGAGE... FIRE. At the command FIRE, operates FIRE switch.
 - j. Observes FIRE and then LAUNCH lights change from AMBER to GREEN.
 - k. Monitors plotting boards and observes flight characteristics of missile and target. Also, monitors MISSILE SPEED and FIN ORDER meters. Operates BURST or FRIEND switches when necessary.
 - l. Continually monitors LIMITED TARGET DAMAGE light to see if it is necessary to operate MINIMUM BURST ALTITUDE OVERRIDE switch. (This is dependent upon warhead yield and local SOP.)
 - m. Observes BURST light change from AMBER to GREEN.
 - n. After BURST, evaluates target damage and repeats steps b. through m., if necessary, or orders new target designated.
 - o. Receives and acknowledges report that target is lost from target tracking radar (azimuth) operator after burst.
 - p. When target is destroyed, places (or orders computer operator to place) PLOTTING BOARD CONDITION switch in STANDBY position.
 - q. Returns battery to its proper alert status as indicated by conditions and local SOP and takes such action as is required to keep the battery in combat readiness.
3. Institutes emergency procedures in the event of communication failure at any point in the above sequence.
 - a. If the launching control trailer or the interarea cable is lost, directs the switchboard operator to switch to WIRE or RADIO.

- b. Upon receipt of COMMC MADE WITH LAUNCHING AREA, commands EMERGENCY PROCEDURE . . . EMERGENCY PROCEDURE, and announces current status.
 - c. Commands MISSION and MISSILE selection to the launching control group.
- 4. Supervises platoon activities in post-firing checks.
 - a. Takes such action as is required to keep personnel and equipment in combat readiness.
 - b. Supervises completion of After-Action Report and Electronic Countermeasures Report, and makes log book entries.
- B. Oversees preparation of fire control platoon for participation in Annual Service Practice (ASP) and supervises platoon activities during ASP.
 - 1. Organizes ASP firing crew.
 - a. Selects from total platoon complement those men who meet the time requirements established by higher headquarters.
 - b. Confers with platoon sergeant and fire control warrant officer, and selects those men who are judged to be most competent.
 - 2. Conducts on-site firing exercises (site alert checks) in accordance with ASP procedures as prescribed by higher headquarters.
 - 3. Supervises performance of system checks of battery control area equipment at the site of the Annual Service Practice and signs receipts if acceptable.
 - 4. Directs his firing team in tests as currently prescribed by higher headquarters.
 - 5. Serves as BCO, at the discretion of battery commander, during firing at Annual Service Practice.
 - 6. Supervises platoon activities in returning equipment to standby status and is released from responsibility for equipment.

Sections VII and VIII below describe duties which are specific to the job of the Launching Platoon Leader.

VII. Care and Utilization of Equipment: Launching Platoon Leader—The launching platoon leader is responsible for the care and utilization of equipment assigned to the platoon.

- A. Insures satisfactory status of organizational equipment.
 - 1. Conducts periodic inspection of platoon area.
 - 2. Delegates to the missile warrant officer the responsibility for submitting Unsatisfactory Equipment Report (Form 468) for battery commander's approval.
 - 3. Reports to battery commander on conditions in platoon which warrant submission of Post Repairs and Utilities (R&U) Work Order (Form 527).
 - 4. Delegates to the missile warrant officer the responsibility for submitting to the guided missile parts clerk a Request for Issue

or Turn-In (Form 1546) to obtain replacement of used parts or equipment.

- B. When a mobile situation exists, supervises the emplacement and march order of tactical equipment.
 - 1. Coordinates the march order of tactical equipment in accordance with procedures described in appropriate manuals.
 - a. Insures preparation of trailer-mounted launching control group for march order.
 - b. Supervises the march order of launcher-loader assemblies.
 - 2. Conducts survey of platoon area in order to properly emplace platoon equipment.
 - a. Determines launcher orientation correction angle (A_L angle).
 - b. Determines launcher elevation angle for booster disposal.
 - c. Assists fire control platoon leader in conducting survey for determination of launcher-to-radar parallax.
 - 3. Coordinates the emplacement of tactical equipment in accordance with procedures described in appropriate manuals.
 - a. Insures proper emplacement of trailer-mounted launching control group.
 - b. Insures proper emplacement of launcher-loader assemblies.
- C. Insures the proper use and operational readiness of tactical equipment.
 - 1. Ascertains that launching area equipment is operationally ready.
 - a. Conducts informal inspection of all stations in launching area upon reporting for duty to insure that equipment is properly manned and that system checks are being carried out as necessary.
 - (1) Observes performance of periodic and routine launching area checks by operators, crewmen, and maintenance personnel to determine that checks are being performed in the proper manner and in the prescribed sequence.
 - (2) Inspects launching area check lists to determine that checks have been performed and that the lists are being kept up to date.
 - (3) Performs occasional routine launching area checks and compares results with data indicated on check sheets to insure that records are accurate.
 - b. Supervises the operation and maintenance of all engineer equipment in the launching area (compressors, diesel power generators, and underground structures).
 - c. Assists the missile warrant officer in coordinating the activities of the missile assembly section.
 - (1) Checks condition of fuel, oxidizer, and starting mix periodically (AJAX missiles only).
 - (2) Serves as safety officer during fueling and arming or defueling and disarming of missiles.
 - 2. Insures that required procedures are followed in handling and storing nuclear warheads.

- a. Enforces security regulations in the launching area.
 - b. Insures that adequate safety procedures are followed in handling nuclear warheads.
 - c. Checks that monitoring for health hazards is carried out as prescribed.
3. Takes action to insure that the launching area equipment remains in the state of readiness designated by sector.
 - a. Receives reports from maintenance personnel on status of equipment, including malfunctions found and actions taken to return equipment to operational status.
 - b. Assists the missile warrant officer in coordinating the activities of the maintenance section.
 - (1) Expedites action on job orders and parts requisitions to facilitate repair of equipment.
 - (2) Checks to insure that Technical Service Work Order (Form 811) is submitted to appropriate technical service.
 - (3) Checks to see that the guided missile parts clerk is furnished with a Request for Issue or Turn-In (Form 1546) and the accountable item which is being turned in for replacement.
 4. Acts to insure completion of records pertinent to operation of tactical equipment.
 - a. Insures that the portion of the battery commander's log book concerning launching area operation is kept up to date.
 - b. Completes that portion of Status of Defense (SOD) Reports dealing with status of equipment in the launching area.

VIII. Drills and Alerts: Launching Platoon Leader—The launching platoon leader is responsible for insuring the fulfillment of the platoon mission during drills and alerts.

- A. Is responsible for the fulfillment of the duties of the launching control officer (LCO).
 1. Supervises the following activities in the launching area according to current manuals and directives.
 - a. Places launching equipment in operation and examines its functioning.
 - b. Confirms that periodic and routine checks have been completed.
 2. Insures that the launching platoon carries out procedures required by being placed in BATTLE STATIONS.
 - a. Hears alarm or is notified by launching control (LC) console operator.
 - b. Goes to launching control trailer.
 - c. Gets condition readiness report from LC console operator.
 - d. Switches his telephone instruments to the tech loop.
 - e. Commands BLUE STATUS, and receives on-duty reports from section panel operators.
 - f. Commands ALERT ALARM OFF after all sections confirm receipt of BLUE status.
 - g. Switches to command loop and reports LAUNCHING PLATOON PRESENT to BCO.

- h. May switch to tech loop and hear missile track radar (MTR) operator request test responder.
 - i. Supervises LC console operator in checking test responder responses to MTR commands.
 - j. Upon receipt of ON DECK command from BCO, acknowledges receipt of command, and commands ALL SECTIONS ON DECK.
 - k. Monitors missile-mission request lights.
 - l. Upon receipt of BLUE STATUS CHECKS COMPLETE from all sections, reports to BCO, LAUNCHING CONTROL GROUP READY FOR ACTION.
3. Insures completion of RED status procedures.
 - a. Upon receipt of RED status, commands RED STATUS.
 - b. Directs LC console operator in the selection of a section.
 - c. Monitors missile acquire check, if it is ordered by BCO.
 - d. If MISSILE REJECT light changes from GREEN to RED, directs LC console operator in the selection of another section.
 - e. Insures that LC console operator positions READY TO FIRE - NOT READY switch on READY TO FIRE.
 - f. Observes FIRE, LAUNCH ORDER, and MISSILE-AWAY lights change from AMBER to GREEN.
 - g. Insures that LC console operator selects test responder or another section.
 4. Supervises in the implementation of emergency procedures in the event cables are disrupted between battery control area and the launching area.
 - a. Insures very close observation of all indicator lights on LC console panel fronts and reports any abnormal indications to the BCO over the command loop.
 - b. Insures completion of all manual operations required of the LC console operator during emergency procedures.
 5. Supervises platoon activities in post-firing checks.
 - a. Returns the launching platoon to its proper-alert status as commanded by BCO.
 - b. Takes such action as is required to keep launching personnel and equipment in combat readiness.
 - c. Prepares After-Action Report and makes log book entries.
- B. Serves as battery control officer (BCO) if designated by the battery commander (see Section VI., A.).
- C. Oversees preparation of launching platoon for participation in Annual Service Practice (ASP) and supervises platoon activities during ASP.
1. Organizes ASP firing crew.
 - a. Selects from total platoon complement those men who meet the time requirements established by higher headquarters.
 - b. Confers with platoon sergeant and missile warrant officer, and selects those men who are judged to be most competent.

2. Conducts ASP exercises on site in accordance with procedure prescribed by higher headquarters.
3. Supervises checkout by his team of launching area equipment at the site of the Annual Service Practice and signs receipt if acceptable.
4. Directs his firing team in tests as currently prescribed by higher headquarters.
5. Serves as launching control officer (see Section VIII., A.).
6. Supervises platoon activities in returning equipment to status and is released from responsibility for equipment.